

Amendment dated December 22, 2003

Reply to Office Action of September 26, 2003

Listing of claims:

1. (currently amended) An A roof structure comprising:

a vertical support web;

an exposure surface perpendicularly bisecting <u>and integral to</u> the support web, wherein at least part of the exposure surface is the exterior of the roof structure, the exposure surface including flanges projecting outwardly in opposing lateral directions; and

a collector perpendicularly bisecting the support web opposite the exposure surface, wherein the collector has flanges projecting outward in opposing lateral directions, each flange having a distal edge upwardly extending from the flange.

- 2. (currently amended) The roof structure of claim 1, wherein the exposed surface and the collector is are integral with the support web to eliminate the necessity for parts of inventory.
- 3. (original) The roof structure of claim 2, wherein the distal edge upwardly extends from each flange at an angle of about 90 to 175 degrees.
- 4. (original) The roof structure of claim 2, wherein the distal edge upwardly extends from each flange at an angle of about 125 to 145 degrees.
 - 5. (previously canceled)
- 6. (original) The roof structure of claim 2, wherein the collector has a depth greater than the maximum expected deflection of the roof support.
- 7. (original) The roof structure of claim 2, wherein the distal edge is general parallel to the support web.
- 8. (original) The roof structure of claim 2, wherein the roof structure is manufactured by a pultrusion process, extrusion process, weldment process, rollform process, or a combination thereof.



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9. (previously amended) A roof panel and roof structure combination comprising: at least one roof panel including an exterior surface and an interior surface; and a roof structure including an exposure surface having a slight negative slope corresponding to a slope of the at least one roof panel, a collector including opposing lateral distal edges that upwardly extend from the collector, a support web integral with and perpendicularly bisecting the exposure surface and the collector, wherein the exposure surface is opposite the collector, and wherein the roof panel is closely adjacent to the support web, and the distal edges of the collector supports the roof panel.

- 10. (original) The combination of claim 9, wherein the roof panel includes a drip edge extending longitudinally along the interior surface of the roof panel.
- 11. (original) The combination of claim 10, wherein the drip edge extends parallel with the longitudinal axis of the roof panel.
- 12. (original) The combination of claim 9, wherein a first roof panel and a second roof panel abut opposing sides of the roof support web, and the exposure surface of the roof support overlaps the exterior surface of both the first panel and the second panel.
- 13. (original) The combination of claim 9, wherein the exposed surface of the roof support includes flanges projecting outward in opposing lateral directions.
 - 14. (allowed) A roof panel and roof structure combination comprising:

at least one roof panel including an exterior surface and an interior surface, wherein the exterior surface of the roof panel includes an arcuate projection; and

a roof structure including an exposure surface having flanges projecting outward in opposing lateral directions, wherein at least one flange of the exposure surface of the roof structure includes an arcuate channel, the arcuate channel being configures to interface with the arcuate projection of the roof panel,

a collector including opposing lateral distal edges that upwardly extend from the collector, and

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a support web integral with and perpendicularly bisecting the exposure surface and the collector, wherein the exposure surface is opposite the collector, and wherein the roof panel is closely adjacent to the support web, and the distal edges of the collector supports the roof panel.

15. (allowed) The combination of claim 14, wherein the arcuate channel extends parallel to the longitudinal axis of the roof support.

16. (allowed) A roof panel and roof structure combination comprising: at least one roof panel including an exterior surface and an interior surface; and a roof structure having a modulus of elasticity of at least about 2,500,000 pounds per square inch including an exposure surface, a collector including opposing lateral distal edges that upwardly extend from the collector, a support web integral with and perpendicularly bisecting the exposure surface and the collector, wherein the exposure surface is opposite the collector, and wherein the roof panel is closely adjacent to the support web, and the distal edges of the collector supports the roof panel.

17. (original) The combination of claim 9, wherein the opposing lateral distal edges of the collector upwardly extend at an angle from the collector of about 90 to 175 degrees.

- 18. (previously canceled)
- 19. (previously canceled)
- 20. (previously canceled)
- 21. (previously canceled)
- 22. (previously canceled)
- 23. (previously canceled)
- 24. (previously canceled)

25. (currently amended) A roof structure comprising:

a vertical support web;

an exposure surface perpendicularly bisecting and integral to the support web; and a collector perpendicularly bisecting the support web opposite the exposure surface, wherein the collector has flanges projecting outward in opposing lateral directions, each



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flange having a distal edge upwardly extending from the flange, the distal edge having a downwardly extending end for accepting a roof panel.

26. (currently amended) A roof structure comprising:

a vertical support web;

an exposure surface perpendicularly bisecting <u>and integral to</u> the support web, wherein at least part of the exposure surface is the exterior of the roof structure, the exposure surface including flanges projecting outward on opposing lateral directions; and

a collector perpendicularly bisecting the support web opposite the exposure surface, wherein the collector has flanges projecting outward in opposing lateral directions, each flange having a distal edge upwardly extending from the flange, the distal edge having a downwardly extending end for accepting a roof panel.

27. (previously added) A roof panel and roof structure combination comprising: at least one roof panel including an exterior surface and an interior surface, the interior surface including a longitudinally extending drip edge that provides a discontinuity in the interior panel surface; and

a roof structure including an exposure surface, a collector including opposing lateral distal edges that upwardly extend from the collector, a support web integral with and perpendicularly bisecting the exposure surface and the collector, wherein the exposure surface is opposite the collector, and wherein the roof panel is closely adjacent to the support web.

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